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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,740	06/13/2001	Scott D. Ritche	P5664	5874

32658 7590 03/10/2005

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EXAMINER

DUONG, THOMAS

ART UNIT PAPER NUMBER

2145

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/880,740

Applicant(s)

RITCHE, SCOTT D.

Examiner

Thomas Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 9-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of *claims 1-8* in Response to Election/Restriction filed on December 29, 2004 is acknowledged.
2. *Claims 9-23* are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Response to Election/Restriction filed on December 29, 2004. In response to this office action, cancellation of nonelected claims is required from the applicant.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. *Claims 1-8* are rejected under 35 U.S.C. 103(a) as being unpatentable over Groath (US006571285B1) and in view of Nixon et al. (US006513060B1).
5. With regard to *claim 1*, Groath discloses,
  - *receiving an error alert*; (Groath, col.2, lines 7-23; col.10, lines 2-8, lines 15-24)

Groath teaches of a method of providing service assurance for a network by *"monitoring a network for events and checking system functions and resources. Such events can include alarms, faults, alerts, etc."* (Groath, col.10, lines 4-6).

- *processing the error alert to create a subset of error data from the failure information including an identification of an affected one of the network devices;* (Groath, col.2, lines 7-23; col.10, lines 2-8, lines 15-32; col.11, lines 43-62)

Groath teaches of a *"collector [that] may be used to collect system information including events and performance data"* (Groath, col.10, lines 26-27). *"The data collected on the status of the network is manipulated and stored in a database"* (Groath, col.10, lines 21-22) for conveying graphically to the appropriate user.

- *determining whether the error alert was generated due to an operating status of the identified network device or due to a fault in one of the communication pathways by remotely performing a diagnostic test on the identified network device;* (Groath, col.2, lines 7-23; col.10, line 64 – col.11, line 3; col.118, lines 11-44)

Groath teaches of a step of *"determining the type of event that occurred"* (Groath, col.10, line 66) and *"generating at least one notification action associated with the determined type of event"* (Groath, col.10, lines 66 – col.11, line 1).

- *creating a job ticket to initiate device or network service, wherein the job ticket includes at least a portion of the failure information from the error alert and information gathered in the diagnostics performing.* (Groath, col.2, lines 7-23; col.10, line 33 – col.11, line 10; col.119, line 64 – col.120, line 9)

Groath teaches of a generating *"at least one notification action ... based upon the occurrence of the event. The notification action may include an*

*alphanumeric page, an e-mail message, a resolution script, a remedy trouble ticket, and/or a log message*" (Groath, col.10, lines 57-61). Groath also states that the notifier *"is able to forward alerts to specific individuals based on the contents of the alert"* (Groath, col.10, lines 40-41) showing that the notification message include at least a portion of the detected event.

However, Groath does not explicitly disclose,

- *based on the determining, performing diagnostics on the identified network device or the communication pathway that caused generation of the error alert; and*

Nixon teaches,

- *based on the determining, performing diagnostics on the identified network device or the communication pathway that caused generation of the error alert; and* (Nixon, col.2, lines 1-15; col.4, lines 18-30, lines 43-49)

Nixon teaches of performing ping and trace route operations to determine the operating status of the network device and storing information, such as the trace route time, in the database for later analysis.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Nixon reference with Groath reference to enhance a system that *"is capable of monitoring a network for events and checking system functions and resources. Such events can include alarms, faults, alerts, etc"* (Groath, col.10, lines 4-6) by actively performing ping and trace route operations to check the operating status of the network device. In response to an occurrence of a network event, the type of the occurred event is determined and *"at least one notification action is generated based upon the event and it may include an*

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*alphanumeric page, an e-mail message, a resolution script, a remedy trouble ticket, and/or a log message” (Groath, col.10, lines 57-61).*

6. With regard to claim 2, Groath and Nixon disclose,

See *claim 1* rejection as detailed above.

Furthermore, Nixon and Groath disclose,

- *wherein the determining includes running Packet Internet Groper (PING) on an IP address on a first side of the identified network device and on an IP address on a second side of the identified network device (Nixon, col.2, lines 1-15; col.4, lines 18-30, lines 43-49; Groath, col.118, lines 11-44)*

Nixon teaches of performing ping and trace route operations to determine the operating status of the network device and storing information, such as the trace route time, in the database for later analysis.

7. With regard to claim 3, Groath and Nixon disclose,

See *claim 1* rejection as detailed above.

Furthermore, Groath and Nixon disclose,

- *wherein the error alert was generated due to a fault in one of the communication pathways, and the method further including determining a last accessible IP address in the communication pathway, incrementing a fault count for the last accessible IP address, and determining whether the incremented fault count exceeds a threshold, wherein the job ticket creating is only performed when the threshold is exceeded. (Groath, col.2, lines 7-23; col.10, lines 2-8, lines 15-24; col.117, line 45 – col.118, line 44; Nixon, col.2, lines 1-15; col.4, lines 18-30, lines 43-49)*

8. With regard to claims 4-6, Groath and Nixon disclose,

See *claim 1* rejection as detailed above.

Furthermore, Groath and Nixon disclose,

- *wherein the error alert was generated due to an operating status of the identified network device and wherein the diagnostics performing includes performing a series of device-oriented tests. (Groath, col.2, lines 7-23; col.10, lines 2-8, lines 15-24; col.117, line 45 – col.118, line 44; Nixon, col.2, lines 1-15; col.4, lines 18-30, lines 43-49)*
- *wherein the job ticket creating is performed only when each of the series of device-oriented tests indicates the identified network device is faulting and wherein the series includes running Packet Internet Groper (PING) on the identified network device, running rup on the identified network device, and running Traceroute software to analyze network connections to the identified network device. (Groath, col.2, lines 7-23; col.10, lines 2-8, lines 15-24; col.117, line 45 – col.118, line 44; Nixon, col.2, lines 1-15; col.4, lines 18-30, lines 43-49)*

It is well known in the networking art to use the “ping”, “traceroute”, and “rup” commands to diagnose networking devices. Specifically, the “ping” command is used for fault isolation. It is used to verify that a network interface is up and running. It also useful in providing round-trip times and packet loss statistics.

The “traceroute” command is used to show the network path that the packets take to arrive at a destination device. The “rup” command to display a summary of the current system status of devices on the network including the current time of day, how long the system has been up, and the load averages, etc.

- *wherein the method further includes determining whether the identified network device is included on an outage list, and further wherein the job ticket creating is not completed when the identified network device is determined to be included on the outage list.* (Groath, col.120, lines 7-13)

9. With regard to claims 7-8, Groath and Nixon disclose,

See *claim 1* rejection as detailed above.

Furthermore, Groath and Nixon disclose,

- *further including providing a display on a user interface of a portion of the subset of error data from the error alert processing and status of the job ticket creating.* (Groath, col.2, lines 7-23; col.10, line 33 – col.11, line 10; col.119, line 64 – col.120, line 9)
- *wherein when the error alert was generated due to a fault in one of the communication pathways, at least periodically checking the communication pathway that caused the generation of the error alert for faults, and wherein results of the checking are included in the display on the user interface.* (Groath, col.2, lines 7-23; col.10, line 33 – col.11, line 10; col.119, line 64 – col.120, line 9; Nixon, col.2, lines 1-15; col.4, lines 18-30, lines 43-49)

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Ahmed (US006813634B1) pertains to the arts of computer network management, and especially to the management of network bandwidth



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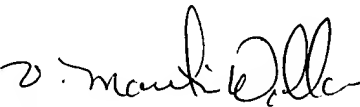
consumed by network management, status, and maintenance messages. More particularly, this invention relates to the arts of intelligent processing and diagnosis of network failures and problems based on fault analysis logic to more accurately detect and isolate computer network problems, to minimize the network bandwidth consumed by maintenance messages, and to effectively notify maintenance personnel of the most likely point of failure.

- Schlener et al. (US006182157B1) relates generally to network management, and more particularly to remote alarm threshold and status monitoring of network elements.
- Schick et al. (US006745242B1) relates generally to quality of service guarantees and, more particularly, to systems and methods for providing connectivity service-level guarantees for network communication.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9306 for After Final communications.

Thomas Duong (AU2145)

March 4, 2005

  
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